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Application Number	09/829,031				
Filing Date	April 9, 2001				
First Named Inventor	Browning et al.				
Group Art Unit	1644				
Examiner Name	Bao Qun Li				
Attorney Docket Number	A063 US				

		_		U.S. PATENT DOCU	MENTS		
xaminer	Cite	U.S. Patent		Name of Patentee or Applicant	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant	
nitials*	No.1	Number	Kind Code <sup>2</sup> ( <i>Il known</i> )	of Cited Document	MM-DD-YYYY	Passages or Relevant Figures Appear	
BO	AA	- 5,925,3		Browning et al.	7/20/99		_
i	AB	5,225,5		Capon et al.	7/6/93		_
	AC	4,816,50	67	Cabilly et al.	3/28/89		
	AD	4,544,54	45	Ryan et al.	10/1/85		
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	(use as ma	ny sheets as n	ecessary)	Examiner Name	Bao Qun Li	
Sheet	2	of	5	Attorney Docket Number	A063 US	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
B109	ca	Duzgunes et al., Journal of Cell. Biochem. Abst. Suppl. 16E 77 (1992); "Liposome Targeting to HIV-Infected Cells via Recombinant Soluble CD4 and CD4-IgG Immunoadhesin"	
2.	сђ	Abe, Yashuhito et al, Lymphokine and Cytokine Research, Vol. 11, No. 2, pp. 115-121 (1992); "Studies of Membrane-Associated and Soluble (Secreted) Lymphotoxin in Human Lymphokine-Activated T-Killer Cells in Vitro"	
	cc ,	Arulanandam, Antonio et al., J. Exp. Med, Vol. 177, pp. 1439-1450 (1993); "A Soluble Multimeric Recombinant CD2 Protein Identifies CD48 as a Low Affinity Ligand for Human CD2: Divergence of CD2 Ligands during the Evolution of Humans and Mice"	
	cd '	Bethell, Delia et al., Journal of Infectious Diseases, Vol. 177, pp. 778-782 (1998); "Pathophysiologic and Prognostic Role of Cytokines in Dengue Hemorrhagic Fever"	
	ce ·	Beutler, B. et al., Science, Vol. 229, pp. 869-871 (1985); "Passive Immunization Against Cachectin/Tumor Necrosis Factor Protects Mice from Lethal Effect of Endotoxin"	
	cf	Browning, Jeffrey et al., Jour. of Immunology, Vol. 154, pp. 33-46 (1995); "Characterization of Surface Lymphotoxin Forms Use of Specific Monoclonal Antibodies and Soluble Receptors"	
	cg ·	Browning, Jeffrey et al., Cell, Vol. 72, pp. 847-856 (1993); "Lymphotoxin Beta, a Novel Member of the TNF Family that Forms a Heteromeric Complex with Lymphotoxin on the Cell Surface"	
	ch `	Chaplin, D. et al., Curr. Opin. in Immunology, Vol. 10, pp. 289-297 (1998); "Cytokine regulation of secondary lymphoid organ development"	
	ci	Crowe, Paul et al., Jour. of Immunological Methods, Vol. 168, pp. 79-89 (1994); "Production of lymphotoxin (LT-alpha) and a soluble dimeric form of its receptor using the baculovirus expression system"	
	ci	Crowe, Paul et al., Science, Vol. 264, pp. 707-710 (1994); "A Lymphotoxin-beta-Specific Receptor"	
	ck	Eppstein, Deborah et al, Proc. Natl Acad. Sci. USA, Vol. 82, pp. 3688-3692 (1985) Cell Biology; "Biological activity of a liposome-encapsulated murine interferon gamma is mediated by a cell membrane receptor"	

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known 09/829,031 **Application Number** April 9, 2001 **Filing Date** Jeffrey Browning et al. First Named Inventor 1644 **Group Art Unit** Bao Qun Li **Examiner Name Attorney Docket Number** A063

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		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	_				
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
Bac.	cl	Fagerstam, Lars et al., Handbook of Affinity Chromatography, Marcel Dekker, Inc., NY, pp. 229-252 (1993); Surface Plasmon Resonance Detection in Affinity Technologies.					
	cm	Force, Walker et al., Journal of Immunology, Vol 155, pp. 5280-5288 (1995); "Mouse Lymphotoxin-beta Receptor Molecular Genetics, Ligand Binding, and Expression"					
	cn	Hober, Didier et al., Am. Jour. Trop. Med. Hyg., Vol. 48, No. 3, pp. 324-331 (1993); "Serum Levels of Tumor Necrosis Factor-alpha (TNF-alpha), Interleukin-6 (IL-6), and interleukin-1 beta (IL-1 beta) in Dengue-Infected Patients"					
	co	Hwang, Karl et al., Proc. Natl. Acad. Sci. USA, Vol. 77, No. 7, pp. 4030-4034 (1980); "Hepatic uptake and degradation of unilamellar sphingomyelin/cholesterol liposomes: A kinetic study"					
	cp •	Lacy, Mark et al., Adv. in Pediatric Infectious Diseases, Vol. 12, pp 21-53 (1997); "Viral Hemorrhagic Fevers"					
	cq •	Lane, Peter et al., Eur. Journal of Immunology, Vol 22, pp. 2573-2578 (1992); "Activated human T cells express a ligand for the human B cell-associated antigen CD40 which participates in T cell-dependent activation of B lymphocytes"					
	cr	Langer, Robert, Chemtech, Vol 12, pp.98-105 (1982); "Controlled release of macromolecules"					
	CS .	Langer, Robert et al., Jour. of Biomedical Materials Research, Vol 15, pp. 267-277 (1981); "Biocompatibility of polymeric delivery systems for macromolecules"					
	ct	Mackay, Fabienne et al., Jour. of Immunology, Vol 159, pp.3299-3310 (1997); "Cytotoxic Activities of Recombinant Soluble Murine Lymphtoxin-alpha and Lymphotoxin-alpha/beta Complexes"					
	cu	Mauri, Davide et al., Immunity, Vol 8, pp. 21-30 (1998); "LIGHT, a New Member of the TNF Superfamily, and Lymphotoxin alpha are Ligands for Herpesvirus Entry Mediator"					
<b>√</b>	cv	Miller, Glenn et al., Jour. Experimental Medicine, Vol 178, pp. 211-222 (1993); "Specific Interaction of Lymphocyte Function-associated Antigen 3 with CD2 can Inhibit T Cell Responses"					

Examiner Signature	us funt:	Date Considered	04/15/13

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m En		_		Application Number	09/829,031	
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TAT9				First Named Inventor	Jeffrey L. Browning	
STATEMENT BY APPLICANT  (use as many sheets as necessary)				Group Art Unit	1644	
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Sheet	4	of	5	Attorney Docket Number	A063 US	

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Proci	cw ·	Montgomery, Rebecca et al., Cell, Vol 87, pp.427-436 (1996); "Herpes Simplex Virus-1 Entry into Cells Mediated by a Novel Member of the TNF/NGF Receptor Family"					
1	cx ·	Morrison, Sherie, Annual Review of Immunology, Vol. 10, pp.239-265 (1992); "IN VITRO ANTIBODIES: Strategies for Production and Application"					
	су	Morrison, Sherie et al., Proc. Natl. Academy of Sciences USA, Vol. 81, pp. 6851-6855 (1984); "Chimeric human antibody molecules: Mouse antigen-binding domains with human constant region domains"					
	cz	Pass, Harvey et al., Chest Surgery Clinics of North America, Vol. 5, No. 1, pp. 73-90 (1995); "The Macrophage, TNF, and other Cytokines"					
	caq	Queen, Cary et al., Proc. Natl. Academy of Sciences USA, Vol. 86, pp. 10029-10033 (1989); "A humanized antibody that binds to the interleukin 2 receptor"					
	cab	Roitt et al., Immunology, 3rd ed., pg. 4.8 (1993)					
	cac	Sheehan, Kathleen et al., Jour. of Immunology, Vol. 142, No. 11, pp. 3884-3893 (1989); "Generation and Characterization of Hamster Monoclonal Antibodies that Neutralize Murine Tumor Necrosis Factors"					
	cac	Sidman, Kenneth et al., Biopolymers, Vol. 22, pp. 547-556 (1983); "Controlled Release of Macromolecules and Pharmaceuticals from Synthetic Polypeptides Based on Glutamic Acid"					
	cae	Smith, Craig et al., Cell, Vol. 76, pp. 959-962 (1994); "The TNF Receptor Superfamily of Cellular and Viral Proteins: Activation, Costimulation, and Death"					
	caf	Traunecker, Andre et al., Nature, Vol. 339, pp. 68-70 (1989); "Highly efficient neutralization of HIV with recombinant CD4-immunoglobulin molecules"					
1	cag	Winter, Greg and Milstein Cesar, Nature, Vol 349, pp. 293-299 (1991); "Man-made antibodies"	+				

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Application Number 09/829,031

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STATEMENT BY APPLICANT

 Application Number
 09/829,031

 Filing Date
 9 April 2001

 First Named Inventor
 Jeffrey L. Browning

 Group Art Unit
 1644

 Examiner Name
 Bao Qun Li

 Attorney Docket Number
 A063 US

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	$\Box$			
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BILL	cah	Wong, Grace et al., Nature, Vol 323, pp. 819-822 (1986); "Tumour necrosis factors alpha and beta inhibit virus replication and synergize with interferons"				
Bac	Cai Zhou, M. et al., Biochemistry, Vol 32, pp. 8193-8198 (1993); "Real-Time Measurements of Kineti EGF Zhou, M. et al., Biochemistry, Vol 32, pp. 8193-8198 (1993) "Binding to Soluble EGF Receptor Monomers and Dimers Support the Dimerization Model for Receptor Activation"					
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